

confirming the clinical impression. Immunofluorescence and neutralization tests more specific for lymphogranuloma venereum are currently being evaluated as diagnostic tools.

The current treatment of choice is with tetracycline. Sulfisoxazole may also be used. Therapy should be continued until a cure is achieved.

Chancroid has an incubation period of two to five days followed by a shallow, painful, soft, dirty ulcer at the point of contact. Multiple lesions are common, regional lymphadenitis occurs, and extragenital occurrence of the disease may be seen.

Diagnosis most commonly is made when the clinical presentation is consistent with chancroid and any one of the following features: (1) rugged serpiginous ulceration of the coronal sulcus; (2) severely erosive lesions, and (3) a classical unilateral bubo. Culture of the organism is often difficult. Gram staining or the use of Barritt's modification of Pappenheim's pyronin methyl green stain may be used on smears of ulcers or bubo aspirates with identification of organisms resembling *Hemophilus ducreyi* (diagnosis is presumptive). Fluorescent antibody staining, if available, is specific and sensitive. The *ducreyi* skin test antigen is no longer available.

The current treatment of choice is with sulfisoxazole. Tetracycline may also be used. Administration of both should be continued until effective cure is achieved. Streptomycin and kanamycin are reserved for resistant and erosive lesions. Buboec should be aspirated as incision and drainage is contraindicated.

Granuloma inguinale has a unknown incubation period with the estimate being 8 to 80 days. The clinical course is characterized by the insidious onset of a usually painless papule or nodule. This lesion erodes leaving a beefy red granular base. Lymphadenopathy may be present.

The diagnosis may be made by scraping the base of a lesion and identifying Donovan bodies using a Wright or Giemsa stain of the material. Tissue biopsy may also be done for identification.

The current treatment of choice is with either tetracycline or streptomycin. Administration of the medication should be continued until a cure has been effected.

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The Use of the FTA-ABS Test for Syphilis

THE FLUORESCENT TREPONEMAL ANTIBODY-ABSORBED (FTA-ABS) test is the most highly specific and sensitive test for syphilis and has generally replaced the TPI (*Treponema pallidum* immobilization) test. Its chief use is to confirm reactive reagin or screening tests for syphilis—such as the Venereal Disease Research Laboratories (VDRL) or rapid plasma reagin (RPR)—in order to distinguish between syphilis cases and "false positive" reactions. It is also useful in the diagnosis of late syphilis when the reagin tests may have become negative. Once positive it generally remains reactive for life, despite therapy, and therefore cannot be utilized to evaluate treatment. It is not appropriately used as a screening test for syphilis because of technical difficulties in making tests on a large number of specimens. The significance of a reactive FTA test on spinal fluid, when the VDRL is negative, has not been established.

The FTA-ABS test is generally reported to physicians as "negative," "borderline" or "reactive." Negative indicates no treponemal antibody present and occurs in incubating or early primary syphilis as well as in uninfected persons. Borderline test results are simply inconclusive and tests should be repeated. If results of a second test are still borderline and clinical data do not indicate syphilis, the patient should be considered not infected. Reactive FTA-ABS tests indicate presence of treponemal antibody, usually a syphilis infection, but in a small percentage of people a positive FTA-ABS may occur in the absence of treponemal disease. This situation most often is found in the presence of abnormal globulins in the blood.

The FTA-ABS is not a quantitative test, but in the laboratory the degree of fluorescence observed when the test is read is recorded as 1+, 2+, 3+ or 4+. The amount of fluorescence may vary on repetition of the test with the same sample of blood or on subsequent samples from the same person; therefore many laboratories do not report the degree of fluorescence for fear of confusing the physician. In general, however, a weakly fluorescent specimen is more likely to be a false positive than a strongly fluorescing one. When clinical features are not suggestive of syphilis in a patient whose FTA-ABS test has been reported as reactive, the laboratory should be asked to provide information on the degree of fluorescence

observed when the test was read. The weakly fluorescing reactive FTA-ABS should be regarded with considerable scepticism if there is no other evidence—serologic, clinical, historical or epidemiologic—of syphilitic disease.

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Unavoidable Vaccine Reactions

A 1974 JUDGMENT by a Texas Federal Appeals Court may seriously and adversely affect public immunization programs throughout the country. The plaintiff in the case was an infant girl in whom paralytic poliomyelitis developed two weeks after poliovaccine was administered to her at a local health department clinic in the spring of 1970. At that time an epidemic of poliomyelitis with over 20 cases was reported in an area of Texas close to the Mexican border. A number of expert witnesses testified that the child's disease was probably due to wild poliovirus circulating in the community. However, the court disregarded this testimony, and ruled against the vaccine manufacturer for failure to warn the infant's parents of possible vaccine complications. The Center for Disease Control estimates that one vaccine recipient-associated paralytic case occurs for every 11.5 million doses of poliomyelitis vaccine distributed in the United States. The court said that the manufacturer of an "unavoidably unsafe product" had a duty to warn the consumer of the risk in use of the product, no matter how slight the chance of injury. This case was appealed to the Supreme Court but the lower court ruling was upheld.

This legal decision requires that manufacturers directly inform each vaccine recipient of the possible complications attendant on use of their products. This decision has placed a burden on public or other outpatient facilities where nurses administer vaccines to groups of patients. The need to inform apparently does not, as a result of this legal decision, add an additional burden on private physicians, who should have a closer medical relationship and adequate communication with their patients.

As a result of the court ruling, national guidelines are being prepared on what information

about rare vaccine complications should be conveyed to vaccine recipients attending public clinics and how it should be done. A few severe and unavoidable reactions will continue to occur even when vaccine recipients are informed about the risks involved. The question of compensation for these reactions is a difficult one, but needs to be answered equitably both for the patient and providers. To date, six European countries and Japan have plans under which the state provides compensation to persons adversely affected. It is hoped that a critical review of the present United States system (or lack of system) to compensate those who suffer severe adverse reactions will result in clarification and resolution of this problem.

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Recent Advances in Imported Disease

LARGE NUMBERS of American tourists travel to exotic parts of the world and imported disease should be a concern of physicians in this country.

In recent years imported civilian malaria has surpassed the number of military cases and any traveler presenting with chills, fever and headache must be considered possibly to have malaria. Chemosuppression, usually with chloroquine, should be recommended for all travelers to malarious areas. Typhoid fever should also be considered in a febrile traveler. Chloramphenicol and ampicillin resistant strains of *Salmonella typhi* are becoming more frequent and widespread worldwide and where this occurs, the treatment of choice should be co-trimoxazole, a combination of trimethoprim and sulfamethoxazole.

Perhaps the leading parasitic cause of diarrhea in travelers is *Giardia lamblia*, which is contracted worldwide and most particularly by visitors to the Soviet Union. A number of waterborne outbreaks of giardiasis have also occurred in this country. Typical symptoms include foul diarrhea, gas and bloating, and prevention should be directed to avoidance of untreated drinking water and fresh fruits and vegetables. The scourge of travelers, "turista" or travelers' diarrhea, has recently been found to be most likely caused by enterotoxin producing strains of *Escherichia coli*—and it is possible that prophylactic antibiotics